

SELECTIVE REPLAY OF STATE INFORMATION WITHIN A COMPUTING DEVICE

ABSTRACT

Techniques are described for synchronizing state information between a plurality of control units. A router, for example, is described that includes a primary control unit and a standby control unit. The primary control unit maintains router resources to ensure operation of the router. To ensure operation, the primary control unit receives state information from the router resources and maintains the state information for consumers, i.e. router resources that require or “consume” state information. The primary control unit performs this state information maintenance process by transmitting update operation messages to consumers and the standby control unit. The consumers respond with an acknowledgement message to both the primary control unit and the standby control unit to inform them that the update has been successfully. The control units use the sequence of these messages to keep all components within the router in sync. Upon assuming control, the standby control unit resumes updating the consumers with state information without having to “relearn” state information, e.g., by way of power cycling the router resources to a known state.